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PATENT APPLICATION
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System and Method for Customizing an Interactive Training Sequence

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SYSTEM AND METHOD FOR CUSTOMIZING AN INTERACTIVE TRAINING SEQUENCE

The present invention generally relates to an improved system and method for customizing an interactive training sequence. More specifically, it relates to a system and method for providing an interactive product service manual that allows for customization of training sequences linked to different login identifications.

Product service and support manuals are no longer in simple text format. In fact, it is becoming more common for product service manuals to contain a variety of features, such as video simulations and animations. The product service manuals are often quite extensive and complex; this is especially true within the computer industry. Because there is so much information contained in product service and support manuals, it can be difficult to find what the user wants, resulting in waste of valuable time and user frustrations. Furthermore, because technology changes so quickly in the computer industry, these product service manuals require frequent changes and updates.

BRIEF SUMMARY OF THE INVENTION

The present invention provides an improved system and method for customizing an interactive training sequence. In one embodiment, the present invention includes one or more sets of questions for gathering information from the user, a customization module for customizing the training sequence responsive to the user response to the set of predefined questions, one or more login identifications for uniquely linking the custom training sequence to the user, a training module for playing the custom training sequence in a user understandable format when selected by the user. The custom training sequence is stored as a

plurality of digital files, and each digital file is designated by a Uniform Resource Locator.

In another embodiment, the customization system and method of the invention further provide an interactive product service manual that includes a documentation module for displaying documents of said manual in a user understandable format responsive to user selection, a simulator module for playing at least one interactive animated simulation in a user understandable format responsive to user selection, a customization module for customizing an interactive training sequence responsive to a user response to a set of predefined questions, and a training module for playing said customized interactive training sequence in a user understandable format responsive to user selection.

DESCRIPTION OF THE DRAWINGS

FIGURE 1 is an exemplary diagram of a network system in which the present invention can be implemented;

FIG. 2A-2C is a flowchart illustrating overall functions of one embodiment of the present invention;

FIG. 3 is a preferred main menu home page;

FIG. 4 is a preferred default page of the documentation module;

FIG. 5 is a preferred default page of the guided tour module;

FIG. 6 is an exemplary benefit page linked from the guided tour default page shown in FIG. 5;

FIG. 7 is an exemplary simulation page of the simulator module;

FIG. 8 is an exemplary practice exam page of the practice module;

FIG. 9 is a preferred information page of the information module;

FIG. 10 is a preferred feedback page of the feedback module;

FIG. 11 is a preferred login page of the training module;

FIG. 12 is an exemplary customization page of the customization module; and,

FIG. 13 is an exemplary page of a custom training sequence.

DETAILED DESCRIPTION

Broadly stated, the present invention is directed to an improved system and method for customizing an interactive training sequence. The present invention allows users to customize their training sequence. The progress of the training sequence can be saved and identified by a unique login identification, which allows users to return to where they left off in the last training sequence. Different modules provide the user a variety of ways to understand the service and setup needs of the product. For example, the users can display documents, simulations and their custom training sequences.

The present invention preferably utilizes HyperText Markup Language ("HTML"), JAVA scripts, and Shockwave Flash Objects. Because all these selected items can be used on most available web browsers, the selected items are most flexible for the implementation of the present invention. Furthermore, the content of the product service manual is stored in different digital files, and each of these digital files is designated by a Uniform Resource Locator.

Turning now to FIG. 1, an exemplary diagram of a network system is shown. The present invention can be implemented in a variety of ways. The service product manual can be displayed on a computer 10, which can be any type of computer that has a software program that can display the manual in a user understandable manner. The service product manual can be stored in any medium that the computer 10 has access to, such as a network server 12, a CD drive 14, and an Internet server 16. Because, among other things, the manual can be updated easily and the wide availability of the Internet, the present invention is preferably implemented using the Internet. Although three possibilities are shown as an example, the present invention can be implemented in many different ways, and other implementations are contemplated and within the scope of the present invention.

A flowchart illustrating the overall functions of one embodiment of the present invention is shown in FIG. 2A. A flowchart of the feedback module and the training module with the customization module are shown in greater detail in FIGS. 2B and 2C, respectively. A main menu is displayed to the user (block 18), which includes eight (8) options for the user to choose from (block 20). More specifically, the main menu page includes a documentation module 22, a guided tour module 24, a simulator module 26, an information module 28, a training module 30, a practice module 32, an index module 34, and a feedback module 36. The preferred main menu page is shown in FIG. 3, and as shown, there are the 8 options. When a user wishes to select one of the options, the user just clicks the selected option on the main menu.

If the user selects the documentation module 22 (block 20), a hyperlink table of contents of the documents is displayed to the user (block 38). The user selects a document from the table of contents (block 40), and the selected document page is displayed to the user (block 42). The preferred table of contents, shown in FIG. 4, provides a list of documents that the user can select by clicking on the selected document. In addition, the 8 options are also included on the left of the table of contents for easier navigation of the product service manual. Again, the user selects another option by simply clicking on the icons provided. In fact, the user will see a label of the icon if the user moves the pointer over the icons without clicking it. As illustrated, a lot of information is provided to the user, but the information is not displayed unless there is an indication that the user is interested.

Similarly, when the guided tour module 24 is selected (block 20), a default guided tour page is returned and displayed to the user (block 44). The user selects a guided tour page (block 46), which is then displayed to the user (block 48). The preferred default guided tour page is shown in FIG. 5 as an example. The navigation buttons are located on the lower right hand corner of the page, which can be selected by clicking on them. For example, if a user clicks on the

benefit button, the benefit page is displayed to the user (shown in FIG. 6). However, there are no limitations in the design and appearance of any of the pages included in the manual as long the function of the page is captured. These other various implementations are contemplated and are within the scope of the present invention.

Again, when the user selects the training module 30 or the simulator module 26 (block 20), the default practice page (block 50) or the default simulator page (block 52) is displayed to the user. The user selects a practice (block 54) or a simulation (block 56), and the selected practice (block 58) or simulation is displayed to the user (block 60). The index module 34 follows similar steps, except the default index page is a hyperlink index page (block 62). A link is selected (block 64) and displayed to the user (block 68).

An exemplary simulation of a control panel of an HP LaserJet Fax Printer is shown in FIG. 7. It is called a simulation because it is not simply text files. In the control panel example, the user can click on any of the buttons shown, and the simulation is designed to react interactively to the clicks depending upon what buttons are pushed. In other words, it reacts just like the real control panel would. Preferably, specific instructions are provided sequentially in order to provide an interactive manual that requires user responses and participation. Therefore, at some point in the sequence, the next sequence will not be displayed to the user unless there is a user response. Again, navigation buttons are provided to the user on the right side of the page for convenience. The practice module, on the other hand, is similar to a test form. An exemplary practice page is shown in FIG. 8. In this example, the clicking of each answer choice gives a different message in the box next to the multiple choices.

What remains is the information module 28, the feedback module 36 and the training module 30. An information page containing additional information on other links and contacts is displayed (block 70) when the user selects the information module 28 (block 20). An exemplary information page is

shown in FIG. 9. Similarly, a feedback form is displayed (block 72) when the user selects the feedback module 36 (block 20), and an example of the form is shown in FIG. 10. However, the feedback module includes an additional feature, which continues in FIG. 2B. The user first fills out the feedback form (block 74) and selects send (block 76). The form is then sent preferably via email to a predefined email address (block 78).

With respect to the training module, when it is selected (block 20), a training login page (shown in FIG. 11) is displayed to the user (block 80), and it is determined whether the user has a login ID (block 82) (see FIG. 2C). The user must provide a login ID (block 84) if the user does not have one (block 82). Once the user logs in with the login identification (block 82), it is determined whether the user already has a custom training sequence linked to the login ID provided by the user (block 86).

If it is determined that the user does not yet have a custom training sequence (block 86), a set of predefined questions is displayed to the user (block 88). An example of the predefined questions page is shown in FIG. 12. Of course, these questions can be varied depending on the need of the customization. The user must then respond to the predefined questions (block 90), and a custom training sequence according to the responses from the user is returned (block 92) and displayed to the user (block 94). Likewise, if the user already has a custom training sequence linked to the login identification (block 86), a custom training sequence is returned to the user (block 96). In this case, the custom training sequence is displayed from the last saved progress (block 94), such as an exemplary page shown in FIG. 13. As shown, a body of text relating to the desired topic is included with one or more test questions, which the user may complete before the next page is shown. Similar to the simulation page, at some point in the training sequence, a user response is required before the next sequence is played to the user. If the user exits a sequence, the last progress of the sequence is saved so

that the user can start from the point where the user exited the training sequence, rather than the beginning of the sequence.

While various embodiments of the present invention have been shown and described, it should be understood that other modifications, substitutions and alternatives are apparent to one of ordinary skill in the art. Such modifications, substitutions and alternatives can be made without departing from the spirit and scope of the invention, which should be determined from the appended claims.

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